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| Title       | Road Construction and Handicraft Production in the Xade Area, Botswana          |
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| Citation    | African study monographs. Supplementary issue (1996), 22: 67-84                 |
| Issue Date  | 1996-12   |
| URL         | <a href="http://dx.doi.org/10.14989/68376">http://dx.doi.org/10.14989/68376</a> |
| Right       |   |
| Type        | Departmental Bulletin Paper   |
| Textversion | publisher   |

## ROAD CONSTRUCTION AND HANDICRAFT PRODUCTION IN THE XADE AREA, BOTSWANA

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**ABSTRACT** This paper aims to clarify the involvement of people living in the Xade area in roadwork and in the handicraft production. The total amount of wages and craft sales paid in the area approximately 3600 pula, 1200 pula per month, respectively. The laborers are employed without difference in pay exists between the sexes and ethnic groups. The San prefer to manufacture hunting tool kits, and the Kgalagadi purchase skins, from the San to make bags with fasteners. Despite the opportunity for high cash earning from them, there are very few people who continue in either of these jobs. For San people who prefer not to commit themselves to a lifestyle involving long-term methodical work, this is a reflection of the San's preference for a flexible subsistence lifestyle.

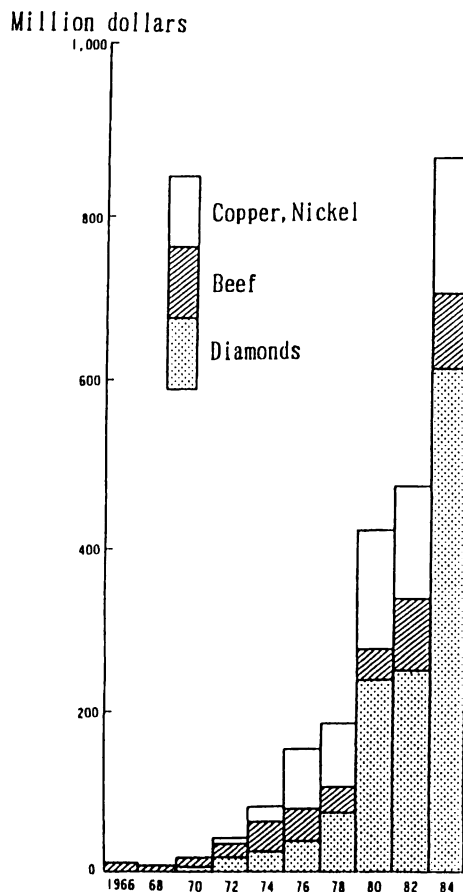
**Key Words:** Road construction; Handicraft production; San; Kgalagadi; Wage labor

### INTRODUCTION

Botswana's traditional main industry of cattle farming has been taken over by diamond, copper and nickel mining since the late 1960's. Due to this shift of the main industry, Botswana is one of the exceptional countries in "black Africa" to experience steady economic growth since its independence in 1966 (Harvey and Lewis, 1990). Botswana's GDP has increased steadily over the years since independence; an annual average of 15% from 1966 to 1976, 11% in the following 2 years, 27% in 1978/79, 14% in 1979/80, and 13% in 1982/83 (Mhozya, 1992).

Revenue from exports in Botswana has increased from around 10 million dollars in 1966 to around 900 million dollars in 1984 (Fig. 1). The quantity of diamond exports, which began in 1968, increased 3-fold from 1978 to 1980, and 2.5-fold from 1982 to 1984. Revenue from diamond exports accounted for approximately 70% of the total export revenue of 900 million dollars in 1984. On the other hand, revenue from beef exports, which accounted for almost 100% of the total revenue from exports in 1966, increased at a diminishing rate, accounting for only around 10% of total export revenue in 1984.

In accordance with the increase in GDP and export revenue, the budget allotted to road construction in Botswana also increased over the years; 4.62-fold from 1979 to 1980, and 10.37-fold from 1984 to 1985. As a result, the total length of surfaced roads in Botswana was extended from 1,121km to 1,967km in the period from 1980 to 1985. However, this also naturally incurred increasing costs for road maintenance. Annual road maintenance costs remained relatively stable



**Fig. 1.** Changes in export revenue in Botswana (1966–1984)

Source: *Ministry of Finance and Development Planning, National Development Plan 1985–91* (Gaborone : Government Printer, 1985), p. 17.

at around 6 million pula from 1979 to 1982, but suddenly soared after 1982, reaching 18 million pula in 1985 (Ministry of Finance and Development Planning, 1985). These figures correspond to the start of construction of a new road in Xade in 1983 and road restoration in 1985, which are discussed later.

In the 1970's, "the future of the San in Botswana society" became an issue in newspapers and magazines as part of the debate on Botswana's national development. This led to the establishment in 1974 of the Basarwa Development Office (BDO) under the administration of the Ministry of Local Government and Lands. The BDO later changed its name to the Extra-Rural Development Office (ERDO) and then to the Remote Area Dwellers Office (RADO).

Botswana Craft Company was also established in 1969 by the Botswana Development Corporation. This company was responsible for the marketing of traditional and modern handicrafts produced by different ethnic groups throughout the nation. The San became involved in transactions with Botswana Craft

Co. in the Dobe area of north-western Botswana in 1974 and in the Xade area of central Botswana in 1979, following the implementation of policies by the BDO to promote the production and marketing of traditional handicrafts for the tourism industry and exports.

This paper aims to clarify the involvement of people living in the Xade area of Botswana in road construction, a public works employment opportunity and in the production of traditional handicrafts, which have provided them with a considerable amount of money.

Among past studies of the San, there have been few reports on their involvement in road construction and handicraft production. According to Lee (1979), the San living in the Dobe area sold 300~500 dollar's worth of handicrafts every month to Botswana Craft Company in 1974, and the settlement of *!xai!xai* in the Dobe area received a cash payment of 186 dollars per month in the same year. Tanaka (1987) reported that Botswana Craft Co. came to buy handicrafts from settlements 2~3 times a year, and the San did not become involved in road construction until 1983. However, these reports have only described handicraft items and production amounts, and have not provided any details on changes in the employment situation for road construction, number of employees and wages.

This paper is a summary of the results of a study by the author in the Ghanzi district of southwestern Botswana, which was carried out over a period five and a half months from August 1987 to the middle of January 1988. During this time, the author observed road construction and handicraft production, and interviewed many workers. The author was also able to obtain from the Ghanzi Road Office a list of the names of road construction employees and register of wages paid to employees since the beginning of road construction in the Xade area. The author was also able to obtain purchasing slips from Ghanzi Craft Co., which replaced the Botswana Craft Co., and was responsible for purchasing all of the handicrafts produced in Xade after 1984. Data for which the source is not indicated in the following section was obtained directly by the author's investigation.

The study area, Xade, is an area in the Central Kalahari Game Reserve, which was established by the government in 1961, and is located about 180km southeast of Ghanzi, the capital of Ghanzi district (Fig. 2). The population of the area, as of the time of the author's study (October 1987) is a little over 600. The majority of the population is comprised of *!Gui* and *!Gana*, two San language groups of Khoisan descent, and Kgalagadi of Bantu descent. There are also one British nurse and 8 Tswana elementary school teachers. People living in the Xade area are involved not only in road construction and handicraft production, but also in subsistence activities such as dog hunting, gathering edible wild plants, raising goats and crop farming. There are also two people employed to take care of the government-built well, which is equipped with a diesel pump, 1 person employed to take charge of a state-run shop, several laborers working on the construction of a water reservoir for wild animals in the Central Kalahari Game Reserve, and several people working as assistants to Japanese researchers. Road construction and handicraft production are the main money-earning jobs for the people living in Xade, and their desire to acquire cash has led to growth in these two business sectors.

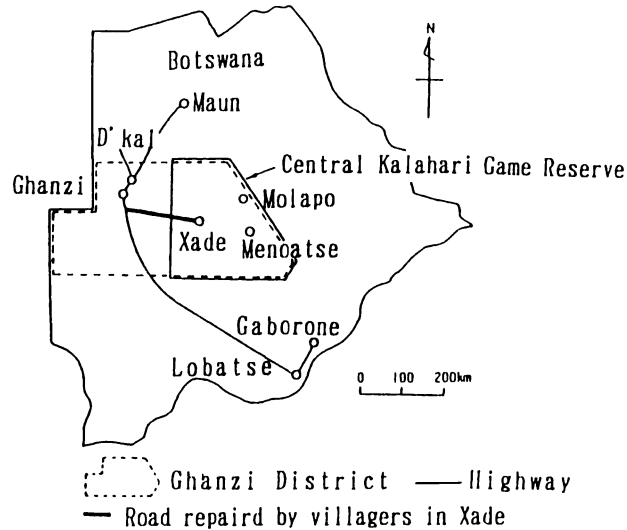


Fig. 2. Location of Study Area

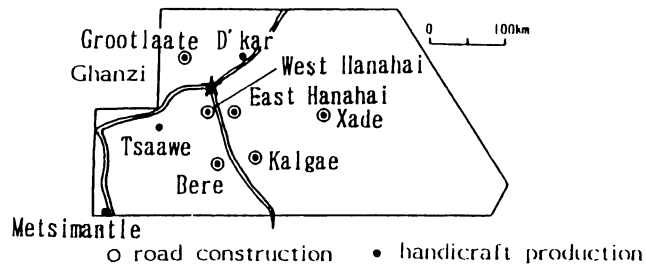


Fig. 3. Distribution of settlements in the Ghanzi district in which the people are involved in road works and folkcraft production

Before the San began to settle in the Xade area in the 1960's, they acquired 80% of their food from gathering edible wild plants. They led a nomadic life, with the members of their group often changing (Silberbauer, 1965; Tanaka, 1971). In 1974, the Basarwa development Office of the Ministry of Local Government and Lands implemented the Remote Area Development Programme (RADP), and a permanent water reservoir was constructed in the center of the Xade area in 1979, followed by construction of an elementary school, clinic, and general store (Tanaka, 1987). The government also began free monthly distributions of cornflour, the staple food in Xade, to the villages. This led to a migration of San people to the Xade area from cattle farms in D'kar and other areas in the Central Kalahari Game Reserve, making Xade the settlement with the largest San population in Botswana.

The increase in road construction and maintenance, and the promotion of handicraft production became the most prominent in the Xade area, and this

area became a flourishing business area in the Ghanzi district. Figure 3 shows the distribution of villages in the Ghanzi district in which many of the people are involved in road construction or handicraft production. The settlements in which many people are involved in road construction can be seen at 4 locations along the highway from Ghanzi to Lobatse, as well as Xade and Grootlaate (Fig. 3). The production of handicrafts is also a flourishing business in these same 6 settlements, as well as in another 3 settlements. Xade is one of the areas in which both road construction and handicraft production are popular jobs.

## ROAD CONSTRUCTION

### Operations Involved in Road Construction

The road which is being constructed by the people in Xade stretches from the Xade settlement in a northwesterly direction until it intersects the highway running between Ghanzi and Lobatwe (see Fig. 1). Although there had been a road connecting Xade and Ghanzi via D'kar, it was abandoned due to the long distance and as part of the road passed through farmland. Shrubbery and grassland was cleared away to make a new two-lane sand road. Construction of the new road began in July 1983 and was completed in December 1984. The road is now marked by parallel ruts from the wide wheels of trucks carrying the government distributions of cornflour and those from usual cars.

Restoration of roads which were completed at the time of this study involves two operations; extracting the gravel from under the ground and laying the gravel on the road. The first of these operations is being carried out near the well in the center of Xade, and the second operation is being carried out about 10km from the center of Xade (at the time of this study, in August 1987). Except for the supervisors sent from the Road Office, there is no difference in the type of work or wages between men and women working on the roads. Working hours are from 7:00 am to 1:00 pm, from Monday to Friday, and Saturday and Sunday are holidays.

The area around Xade in the Central Kalahari Game Reserve, is covered by a deep layer of Kalahari sand, making it difficult to find the small stones needed for the gravel roads. At the extraction site, gravel is extracted after digging down several meters below the surface of the ground. Workers at the extraction site line up in a row and digging with picks in 10-minute shifts. Another group of people use shovels to load up a cart, which is pulled by several donkeys, with the gravel. When the cart is filled with gravel, two men lead the donkeys to the road being constructed, where other workers lay the gravel on the road.

Thus, road construction is a methodical manual operation carried out under the supervision of a government official. Apart from the absence of large machinery, the operation is not greatly different to the method of road construction in Japan. However, as is pointed out in the next section, there are some kinds of obstacle for the San.

### Changes in the Number and Composition of Workers

Figure 4 shows monthly changes in the number of workers employed in the construction and restoration of the new road from 1983 to 1987. Ten people were employed when the road construction started in July 1983, and this number increased to 25 in September of the same year. When full-scale construction operations began in January 1984, the number of workers increased to 58, followed by temporary rapid decreases in March and June of the same year. However, after construction of the road was completed, the number decreased again to 25 in April of 1985. The number of workers remained at around the same level for some time after this, and then increased again to around 50 from June 1987. Thus, looking at the changes in the number of workers over this period, 2 peaks where the number of workers reached over 50 can be seen, with intervals between these peaks of around 25 workers.

Table 1 shows a detailed record of the employment of road construction workers from July 1983 to August 1987. A total of 114 people were employed for road construction during this period. This table shows the detailed monthly employment record for 44 (32 men and 12 women) of these 114 workers. As the table shows, only M⑤ and M⑬ continued to work for almost every month during this period. Various patterns in the employment record can be seen among the other workers. For example, some people like M④, M④②, and M④④ gave up after only one month, while others like F⑰ and M⑳ started working again 2~3 months after quitting. F⑰ stopped working 3 times between September 1983 and November 1984, while M⑳ stopped working twice, from April 1984 and from June 1985, during the period from January 1984 to September 1986.

These patterns do not correspond to the sudden decrease in workers in November 1984 (see Fig. 4), suggesting that it is not the different requirements of the number of workers for road construction and restoration that affects the monthly employment record, but rather just personal considerations of each worker. For example, one worker (not included in Table 1) was dismissed in October 1987 after he abandoned his work to search for his horse which went missing<sup>(1)</sup>.

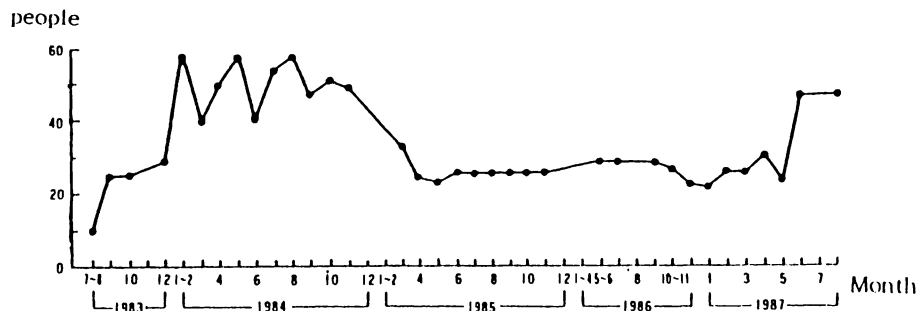


Fig. 4. Changes in the number of workers involved in road construction in Xade (1983–1987)

Source: List of the names of workers involved in road construction provided by the Ghanzi Road Office





Although there were no people employed for road construction from outside the Xade area during the first few months of construction from July to December 1983, the employment of people from outside the Xade area gradually increased after this. From January to April 1984, 2-3 people were employed from outside Xade to make up for a deficiency in workers, and this number increased to 20-30 from May to November of the same year. These outsiders included !Gui (e.g. M① in Table 1) from Kacgae, Nharo (one of the San language groups) from East Hanahai (e.g. M④) and West Hanahai (e.g. M⑤), and Kgalagadi from Ghanzi. The number of people employed from outside Xade decreased again to 1-3 from March to November 1985, but later increased to more than 10 people after 1986. Thus, in this way, extra workers were employed from outside the Xade area for road construction in Xade to make up for deficiencies in the number of required workers.

### Changes in Wages

Wages are paid in cash directly to the workers by government officials from the Ghanzi Road Office who visit the Xade area once a month. The daily wage in August 1987 was 3.96 pula (approximately 317 yen. All conversions are based on the 1987 exchange rate.), which comes to 79.2 pula for a month of 20 working days. As there is a total of 46 people employed in road construction from the Xade area, as at the time of this study in August 1987, this means a total sum of 3,643.2 pula (about 300,000 yen) is paid in cash to people in Xade in August 1987.

As the San usually buy such commodities as sugar, tea, cigarettes and liquor from the general store in Xade on credit, some of their monthly wage payment soon disappears to the manager of the store who comes to collect debts just after the wage payments have been completed.

Figure 5 shows the changes in daily wages paid to road construction workers. Wages increased 4 times during a 4-year period from August 1983 to August 1987, from 1.5 pula to 3.96 pula, a 2.6-fold increase. However, although the gross income of people in Xade increased greatly during this period, inflation also increased, and it is not clear if there was any increase or not in real income.

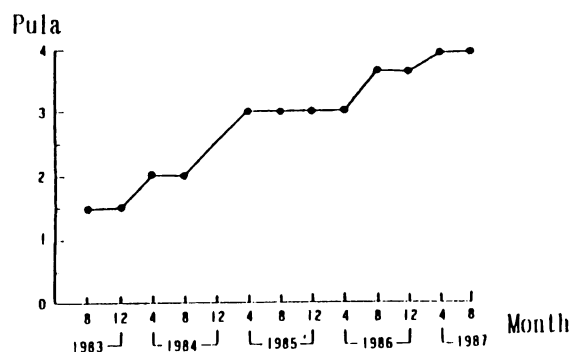


Fig. 5. Changes in the wages of workers involved in road construction (1983-1987)

Source: Register of wages paid by the Ghanzi Road Office

## PRODUCTION AND DISTRIBUTION OF HANDICRAFTS

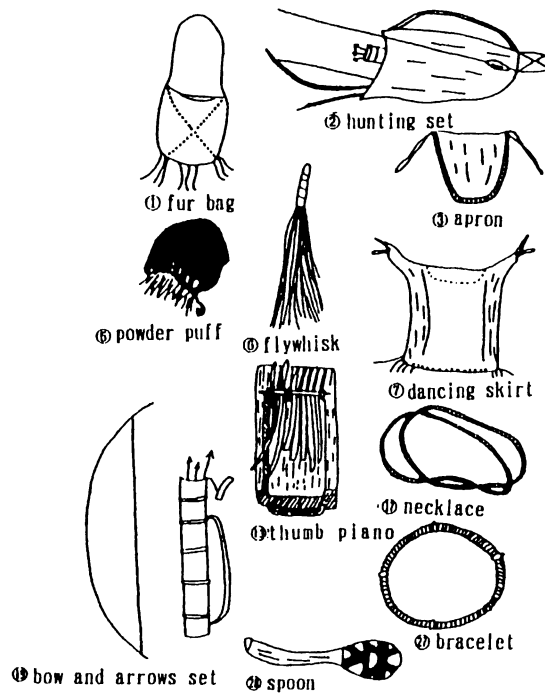
It was reported that a European merchant who visited Ghanzi in the mid-1960's, purchased necklaces made from pieces of shell from ostrich eggs at 15 cents each and sold them at 100 times this price in a curio shop in Johannesburg, South Africa (Lee, 1979). It is possible that the San in Xade were also involved in supplying these necklaces.

The Ghanzi Craft Company, which was established in 1983, replaced the Botswana Craft Company as the buyer of handicrafts in the Xade area from 1984. The Ghanzi Craft Company established its office and sales outlet in the center of Ghanzi town, and staff from the company visit settlements in the Ghanzi district (see Fig. 3) as well as some settlements in the Kalahari district to buy handicrafts from the producers. In its first year of operation, the Ghanzi Craft Company only purchased a total of 800 items of handicrafts, partly because the company did not have a vehicle for transporting the handicrafts, but after the company acquired a land cruiser, partly financed by the government, for transporting products from remote areas, the total number of purchases in 1984 increased to almost 2,500 items. This number decreased slightly in 1985, but increased again to around 3,000 items in 1986<sup>(2)</sup>.

### Methods of Handicraft Production

The handicrafts can be categorized into 3 different producer price ranges: (1) over 10 pula (about 800 yen), which includes bags made from wild animal skins, hunting sets<sup>(3)</sup>, dancing skirts, mortars, skins, cloaks; (2) from 5 to 10 pula, which includes aprons, thumb pianos, bow and arrow sets; and (3) less than 5 pula, which includes repair kits for hunting sets, powder puffs, fly whisks, traps, knives, sandals, necklaces, sieves, poison pouches, dancing rattles, earrings, bracelets, and pipes (Table 2, Fig. 6). Although the animal skin bag, which is shaped like a handbag, is not a traditional product of the San or Kgalagadi, most of these handicrafts were products traditionally used among the San or Kgalagadi.

The author will explain in more detail about the bags made from wild animal skins and hunting sets, which were two of the most popular handicrafts produced for sale in the 1980's. Firstly, the bags were made from a combination of tanned skins from several different wild animals such as the genet, jackal and wildcat, and involved a very complex, time-consuming production process. Thread made from the tendons of the gemsbok and kudu was used to sew together the different pieces of animal skin. The Kgalagadi men are very skillful at making these bags, and they not only purchase skins from the San in Xade, but went as far as Molapo and Menoatse (see Fig. 2), which is located 130km from Xade, to purchase jackal and steenbok skins from hunters there. The author witnessed a Kgalagadi craftsman buying skins in Molapo on December 7, 1987. The Kgalagadi craftsman had hitched a ride in a government car which was travelling to Molapo. The Kgalagadi are sometimes forced to make long trips to such places outside Xade because it seems that the increased demand for the bags in Xade has led to a shortage of skins for sale in Xade.



**Fig. 6.** Main folkcrafts

Source: Per Jensen, *Basarwa Craft from Ghanzi District* (Ghanzi: Serowe Printers Co-op., 1987), pp. 3–30. numbers correspond to those shown in Table 2.

The hunting set is currently the most popular item produced by the San. The manufacture of this item is also very complex involving the following processes: (1) Digging up acacia roots, which grow straight down into the soil, and using the skin of the roots for the manufacture of the quiver to keep the arrows in, (2) making spearheads and arrowheads from pieces of iron, (3) making arrows, (4) making a shoulder bag by sewing together pieces of skin from animals caught in traps, and (5) making the bow, digging stick and spear. The San dig up acacia roots for the quiver during their hunting expeditions when they can not find any prey, and look for pieces of wood suitable for making digging sticks while they are gathering firewood. The animal skins used to make the shoulder bag are sometimes from animals trapped by the hunting set producers themselves, or are sometimes presented or sold by other San. As the San craftsmen usually only spend 1–2 hours each day working on the hunting sets, due to the many different materials and manufacturing processes involved, it takes almost two weeks to complete one set.

#### Changes in Production Amounts and Revenue

Although some crafts produced in Xade, especially the animal skin bags are sometimes sold directly to outsiders visiting the Xade area as well as to teachers at the elementary school and nurses working at the clinic in Xade, most of the

**Table 2.** Production amounts and prices of handicrafts in Xada (1986, 1987)

| Item                 | number of items |     |     |     |     |     |     |     |     |     |      | total number | producer price (pula) | wholesale price per one (pula) |
|----------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|--------------|-----------------------|--------------------------------|
|                      | 1985            |     |     |     |     |     | 87  |     |     |     |      |              |                       |                                |
|                      | 12              |     |     |     |     |     | 10  |     |     |     |      |              |                       |                                |
|                      | 10              |     |     |     |     |     | 15  |     |     |     |      |              |                       |                                |
| 1986                 | 1               | 3   | 4   | 6   | 8   | 9   | 10  | 11  | 1   | 11  |      |              |                       |                                |
| 16                   | 9               | 5   | 12  | 20  | 16  | 16  | 28  | 29  | 15  | 15  |      |              |                       |                                |
| ① fur bag            | 10              | 25  | 18  | 27  | 21  | 17  | 20  | 146 | 35  | ... | 319  | 11           | 14                    |                                |
| ② hunting set        | 25              | 13  | 21  | 3   | 5   | 16  | 25  | 44  | 108 | 32  | 292  | 16           | 20                    |                                |
| ③ apron              | 23              | 19  | 13  | 12  | 5   | 13  | 21  | 73  | 60  | ... | 239  | 7            | 8                     |                                |
| ④ repair kit         | 1               | 6   | 10  | 5   | 4   | 7   | 19  | 42  | 97  | 0   | 191  | 3            | ...                   |                                |
| ⑤ powder puff        | 16              | 5   | 14  | 6   | 10  | 2   | 17  | 58  | 56  | 0   | 184  | 4            | 5                     |                                |
| ⑥ flywhisk           | 4               | 8   | 6   | 18  | 2   | 7   | 3   | 21  | 5   | 2   | 76   | 4            | 5                     |                                |
| ⑦ dancing skirt      | 8               | 10  | 3   | 3   | 0   | 1   | 3   | 19  | 0   | 3   | 50   | 18           | 22                    |                                |
| ⑧ club               | 1               | 0   | 13  | 9   | 5   | 6   | 0   | 2   | 8   | ... | 44   | ...          | ...                   |                                |
| ⑨ trap               | 0               | 0   | 0   | 0   | 1   | 5   | 0   | 27  | 0   | 0   | 33   | 2            | 2.5                   |                                |
| ⑩ mortar             | 2               | 1   | 5   | 4   | 1   | 6   | 0   | 14  | 0   | 4   | 37   | 10           | 13                    |                                |
| ⑪ knife              | 0               | 0   | 4   | 2   | 0   | 15  | 1   | ... | 5   | 21  | 48   | 2            | 3                     |                                |
| ⑫ skin               | 0               | 3   | 6   | 7   | 2   | 1   | 8   | 4   | 0   | ... | 31   | 18           | 22                    |                                |
| ⑬ thumb piano        | 15              | 0   | 0   | 1   | 1   | 2   | 0   | 5   | 0   | 4   | 28   | 6            | 7                     |                                |
| ⑭ mat                | 1               | 3   | 2   | 2   | 1   | 1   | 4   | 10  | 0   | ... | 24   | ...          | ...                   |                                |
| ⑮ mantle             | 0               | 0   | 1   | 3   | 0   | 7   | 3   | 8   | 2   | 18  | 42   | 18           | 22                    |                                |
| ⑯ sandal             | 0               | 0   | 0   | 0   | 0   | 0   | 1   | 25  | 0   | 20  | 46   | 3            | 4                     |                                |
| ⑰ necklace           | 3               | 3   | 2   | 2   | 2   | 1   | 0   | 3   | 3   | 1   | 20   | 2            | 2.5                   |                                |
| ⑱ sieve              | 0               | 0   | 0   | 0   | 0   | 0   | 0   | 13  | 4   | 10  | 27   | 4            | 5                     |                                |
| ⑲ bow and arrows set | 3               | 0   | 0   | 0   | 0   | 0   | 0   | 3   | 10  | 0   | 16   | 7            | 9                     |                                |
| ⑳ net                | 0               | 0   | 0   | 0   | 0   | 0   | 0   | 12  | 0   | ... | 12   | ...          | ...                   |                                |
| ㉑ hat                | 0               | 2   | 0   | 0   | 0   | 0   | 1   | 8   | 0   | ... | 11   | ...          | ...                   |                                |
| ㉒ pouch for poison   | 1               | 1   | 0   | 1   | 1   | 0   | 4   | 2   | 0   | ... | 10   | 2            | 3                     |                                |
| ㉓ ankle rattles      | 0               | 0   | 4   | 0   | 1   | 3   | 0   | 0   | 0   | 13  | 21   | 4            | 5                     |                                |
| ㉔ earrings           | 0               | 1   | 0   | 2   | 0   | 3   | 2   | ... | 0   | ... | 8    | 2            | 3                     |                                |
| ㉕ purse              | 0               | 2   | 2   | 1   | 1   | 0   | 0   | 1   | 0   | ... | 7    | ...          | ...                   |                                |
| ㉖ stick              | 1               | 0   | 0   | 0   | 0   | 0   | 0   | 5   | 0   | ... | 6    | ...          | ...                   |                                |
| ㉗ bracelet           | ...             | ... | ... | ... | ... | ... | ... | ... | ... | ... | many | 0.4          | 0.5                   |                                |
| ㉘ spoon              | ...             | ... | ... | ... | ... | ... | ... | ... | ... | ... | many | ...          | ...                   |                                |
| ㉙ pipe               | ...             | ... | ... | ... | ... | ... | ... | ... | ... | ... | many | 1            | 1.5                   |                                |

Source: Trading register of Ghanzi Craft Co. .... shows no records

items are sold to the Ghanzi Craft Company. Thus, the approximate total revenue from sales of handicrafts in Xade can be calculated from the purchasing slips of Ghanzi Craft Company.

Table 3 shows the changes in revenue from the sales of handicrafts in Xade based on the purchasing records of Ghanzi Craft Company. However, as staff from the Ghanzi Craft Co. did not visit the Xade area on a regular monthly cycle, daily rather than monthly calculations of sales revenue are more appropriate.

**Table 3.** Changes in revenue from the production of handicrafts in Xade (1986, 1987) pula

| Period     | days | revenue (pula) | revenue per day (pula) |
|------------|------|----------------|------------------------|
| 1986       |      |                |                        |
| 4/2 ~ 6/11 | 71   | 709.45         | 10.0                   |
| ~ 6/30     | 19   | 398.00         | 20.9                   |
| ~ 8/16     | 47   | 369.10         | 7.9                    |
| ~ 9/16     | 31   | 476.15         | 15.4                   |
| ~ 11/29    | 74   | 2,106.60       | 28.5                   |
| 1987       |      |                |                        |
| ~ 1/21     | 53   | 2,297.00       | 43.3                   |
| ~ 3/21     | 59   | 4,198.70       | 71.2                   |
| ~ 5/25     | 65   | 3,359.10       | 51.7                   |
| ~ 6/30     | 36   | 1,085.00       | 30.1                   |
| ~ 8/12     | 43   | 1,710.10       | 39.8                   |
| ~ 10/14    | 63   | 1,658.80       | 26.3                   |
| ~ 11/15    | 32   | 2,585.00       | 80.8                   |

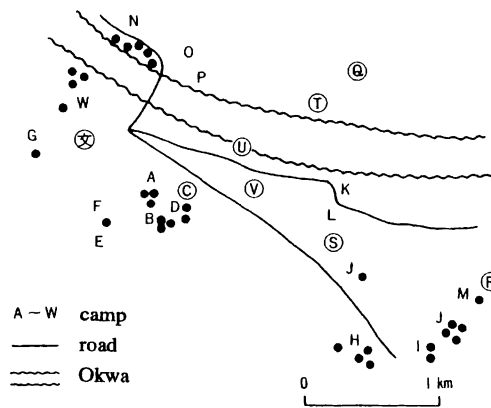
Source: from data provided by Per Jensen of Ghanzi Craft Co.

Daily revenue figures show a wide range from 7.9 to 80.8 pula, indicating that handicrafts were not produced on a regular daily basis. Converting to a monthly calculation, the revenue for August in 1987 comes to approximately 1,200 pula (39.8 pula  $\times$  31 days).

In order to see the monthly changes in production amounts and revenue, monthly or 2-monthly figures for the production amount, producer price per item and wholesale price from January 1986 to January 1987 are listed in Table 2. As can be seen from the table, bags made from animal skins (①) and hunting sets (②) are produced in the largest numbers and are also relatively expensive, while smaller items such as bracelets, spoons and pipes are the cheapest, but produced in large quantities.

There are some notable changes in production amounts. Although there was only a small amount (less than 30) of animal skin bags (①) produced from January to October in 1986, this figure shot up to 146 in November of the same year. The number of hunting sets (②) produced from December 1986 to January 1987 was 108, and the number of aprons (③) produced in November 1986 was 73, which are both large increases compared to the previous month's quantities. The table also shows sudden increases in production amounts from previous months in 1986 for dancing skirts in November, clubs in March, traps in November, mortars in November, knives in September, thumb pianos in January, sandals in November, and sieves in November. Large increases in the production amounts of some items from November can obviously not be explained by any correlation to other subsistence activities such as farming, which are busy activities starting from around December or January.

Some other interesting changes in production amounts which can be seen in the period from October to November in 1987 are that repair kits for hunting sets (④), powder puffs (⑤) and hunting traps (⑨) were not produced at all, while the production of hunting sets (②) continued at a high level, and the amount of cloaks (⑮) produced increased dramatically<sup>(4)</sup>.



**Fig. 7.** Distribution of Hunting-set Producers in Xade from October to November in 1987

Source: Trading register of Ghanzi Craft Co.

○ indicates settlements with many Kgalagadi residents

● indicates one hunting set

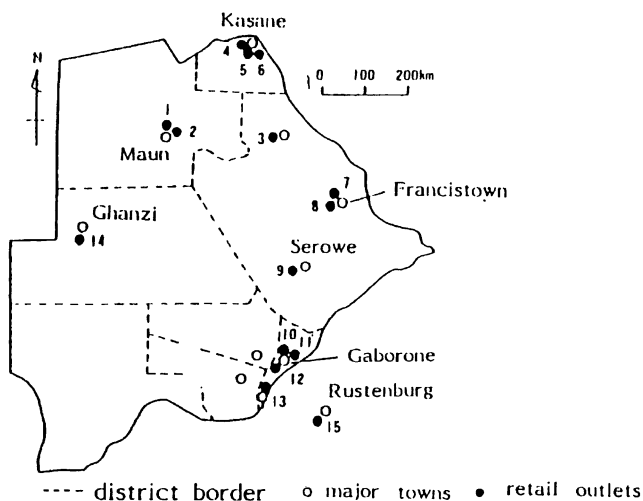
### Relationship between Suppliers of Materials for Handicrafts and Handicraft Producers

Both the amount of and revenue from hunting sets are the highest among the handicrafts produced in Xade, excluding handicrafts for which the production amount is unclear. Figure 7 shows the distribution of hunting set producers from October to November in 1987. Among the settlements A to W, Q, R, S, T, U and V are inhabited mainly by Kgalagadi, and therefore hunting sets are not produced in these settlements. Hunting sets are produced in 70.6% of the San settlements, excluding E, K, L, O and P. The settlements with the highest production are N (5 items per 2 months), H, J and W (4 items), and A and B (4 items).

The Kgalagadi, as mentioned above, buy animal skins from both the San in Xade as well as from hunters in settlements outside Xade. Some Kgalagadi craftsmen produce bags equipped with a fastener, which is sold at a higher price. Thus, craft producers in Xade can be divided into two groups; the San who supply animal skins and produce hunting sets, and the Kgalagadi who produce bags made from animal skins.

### Distribution of handicrafts

When staffs from the Ghanzi Craft Co. visit Xade, they drive around the area advertising their presence. Transactions are carried out near the well in the center of the settlement. People from all over the Xade area gather there with their wares. Producers of animal skin bags and aprons are given a card for receipt of their goods which is later exchanged for cash after their goods have been sold. The author sometimes witnessed the return of their goods which could not be sold. Various materials used to make handicrafts are also sold in the same market place such as cocoon shells used to make dancing rattles worn on the ankles, beads used as ornaments on the bags and bracelets, and iron used for making



**Fig. 8.** Distribution of the retail outlets of Ghanzi Craft Co.

1. Bushman Curio Shop 2. Island Safari Lodge 3. Nata Lodge 4. Chobe Game Lodge 5. Chobe Safari Lodge 6. Kasane Enterprise 7. B.G.I. 8. Maratodi 9. Serowe Museum 10. Botswana Craft 11. Bushman Gift Shop 12. National Museum 13. Tiro ya Diatla 14. Ghanzi Craft 15. Africa Artifact

Source: From data provided by Per Jensen of Ghanzi Craft Co.

arrowheads and spearheads. The craft producers immediately use the money they have just received from selling their products to buy these materials.

Staffs from the Ghanzi Craft Co. visit the 9 settlements in Ghanzi district shown in Figure 3 to buy handicrafts, and stock all the items bought in their Ghanzi office, from where the crafts are later sold to retail outlets.

Figure 8 shows the distribution of retail outlets to which the crafts are sold by the Ghanzi Craft Co. Except for one of the retail outlets, Africa Artifact in Rustenburg, South Africa, all the retail outlets are located in the major towns of Botswana, such as Francistown and Serowe. Some retail outlets are souvenir shops in popular tourist spots such as Kasane, next to Chobe Game Reserve which is said to have the largest elephant population in the world; Maun, at the entrance to the Okavango inland delta, in which the Moremi National Park is located; and the capital, Gaborone, which has the National Museum.

In December 1989, the author noticed that hunting sets produced by the San in Xade were for sale in a souvenir shop at Gaborone International Airport. This souvenir shop was a branch of Botswana Craft (Fig. 8, No. 10), which meant the goods had been through a long distribution route from Xade to Ghanzi and finally to Gaborone.

The fact that handicrafts produced by the San in Xade are sold in shops throughout the nation shows the importance of San craft production in Botswana's tourist industry.

## THE IMPORTANCE OF ROAD CONSTRUCTION AND HANDICRAFT PRODUCTION FOR SUBSISTENCE—THE CASE OF K CAMP IN XADE—

The camp K is located about 1km east from the center where the elementary school and clinic are located. The camp comprises 5 households of both !Gui and !Gana. The total population is 17, which includes 11 men and 6 women. Three of the 17 people are children under 5 years old, who do not contribute to subsistence living.

Table 4 shows the combination of subsistence activities carried out by members

**Table 4.** Combination of subsistence activities carried out by the members of five households in K settlement, Xade

| household | member | sex | age   | subsistence    | details of subsistence activities   |
|-----------|--------|-----|-------|----------------|---|
| I         | ①      | M   | 50~60 | H, C, P, R     | Owns many goats. Worked on a farm on the outskirts of Ghanzi district in the 1950's (before the anthropologist, G.B. Silberbauer visited the area). |
|           | ②      | F   | 50~60 | G, C, P, R     | Makes ankle rattles for dancing.  |
|           | ③      | F   | 15~20 | G, P           | Makes animal skin bags and aprons   |
| II        | ④      | M   | 40~45 | H, (C), P, R   | Worked on road construction for 2 months in 1983. Skins obtained by hunting and trapping were sold to the Kgalagadi. Also makes hunting sets.       |
|           | ⑤      | F   | 40~45 | G, P, R        | Makes animal skin bags and necklaces  |
| III       | ⑥      | M   | 25~30 | H, (C), P, R   | Worked on road construction for 2 months in 1984. Worked as assistant to Japanese researcher for about 5 months in 1987.                            |
|           | ⑦      | F   | 20~25 | G, P           |   |
| IV        | ⑧      | M   | 35~40 | H, (C), P, D   | Has worked on road construction and as assistant to Japanese researcher. Will be engaged in hunting after this investigation.                       |
|           | ⑨      | F   | 30    | G, P           | Worked on road construction in 1991.  |
|           | ⑩      | M   | 5     |                |   |
|           | ⑪      | F   | 3     |                |   |
|           | ⑫      | M   | 1     |                |   |
| V         | ⑬      | M   | 25~30 | H, (C), (P), R | Makes hunting sets and works as assistant to Japanese researcher.   |
|           | ⑭      | M   | 20    | H, (C), (P), R | Worked on a farm in Ghanzi  |
|           | ⑮      | M   | 20    | H, (C), (P), R | Worked on road construction in 1989.  |
|           | ⑯      | M   | 15    | H, (C), (P), R | Employed in public works project in 1993.   |
|           | ⑰      | M   | 15    | H, (C), (P), R | Same as ⑯   |

Source: Author's interviews with each person

- (Note) (1) G: Gathering of edible wild plants  
 C: Crop farming H: Hunting P: Goat raising  
 R: Handicraft production D: Road construction  
 ( ) indicates help from others  
 (2) M denotes male workers and F denotes female workers  
 (3) \* subsistence activities as of August 1987  
 (4) \*\* Clearing of shrubbery and grassland to make a firebreak along the border of the Central Kalahari Game Reserve



of the five households in camp K. The men are involved in hunting (H in the table) and the women are involved in gathering edible wild plants, while both men and women are involved in the other activities such as crop farming in the rainy season, goat raising and handicraft production. A man ①, who is an elder in the camp, works at clearing away land and cultivating crops, but is assisted by other members of the camp. However, this work is only carried out during a period of about one week sometime from December to January. M① also owns the majority of the goats in the camp, although most of the people in the camp help to take care of them. Goat raising only involves work in the mornings and evenings, and can be carried out along with other jobs. Handicraft production is a specialized job carried out by different members of the settlement. For example, M① is involved in the production of dancing rattles, M④ and M⑬ make hunting sets, F② makes animal skin bags and aprons, and F⑤ makes animal skin bags and necklaces.

M④ and M⑥ both worked on road construction for 2 months in 1983 and 1984, respectively, and the money earned was used to buy clothes, blankets, as well as tea, sugar and cigarettes. After finishing their road construction jobs, M④ and M⑥ switched to other jobs; hunting with dogs or traps, assistants to a Japanese researcher or handicraft production. Unfortunately, the people in camp K were not so successful in their sales of handicrafts; many hunting set repair kits which they made were not bought by the Ghanzi Craft Co., and ended up left hanging in their huts. This shows the difficulty San have in adapting to market trends for the demand of handicrafts. After this unsuccessful venture, they cut down on handicraft production and turned their attention more to hunting.

Although road construction was an important source of cash revenue for subsistence living, the people in camp K were involved in a combination of various different activities such as craft production, hunting, gathering edible wild plants, goat raising and crop farming (Ikeya, 1993, 1994). Let's examine the proportions of revenue earned from these different activities in the total household budget. One month's wages for road construction (about 80 pula in August 1987) is approximately equal to either the money earned from the sale of 5 hunting sets or the sale of meat from 2 gemsboks. Two hunting sets can be produced in one month, and an average of one gemsbok is killed every month. Other subsistence activities do not generate cash revenue. Although many of the people in camp K first worked on road construction which provides almost twice the revenue compared to other jobs, by August 1987, they had all stopped due to physical fatigue. Thus, in August 1987, cash revenue for the people in camp K was about half from handicraft production and half from hunting.

This change from an initial period of employment in road construction back to traditional activities such as hunting or handicraft production was a phenomenon not limited to the people of camp K, but was seen among many of the San. For example, M⑯ in Table 1 gave up road construction after working for only 2 months (September~October, 1983), and switched to craft production, which he was still engaged in at the time of this study. M⑰ also worked on road construction for only 3 months from June to August in 1985, and at the time of this study was engaged in hunting and the production of hunting sets.

However, although most of the Kgalagadi continued in their handicraft jobs, except for a few cases like M<sup>16</sup>, most of the San only work when they feel so inclined. The reasons for this passive feeling toward work are due to the knowledge that their handicrafts may not always be bought by Ghanzi Craft Co. and the feeling of security they have because of the government free distributions of cornflour, which provides them with at least a minimum subsistence food supply.

Thus, due to this general passive feeling toward work, the San are not suited to a long-term continuous commitment to work, especially paid employment for methodical work such as road construction, and even to more relaxing jobs such as handicraft production, which they tend to view as only a means to supplement deficiencies in cash revenue.

### Notes

- (1) It has also been reported that some of the San employed on farms in the Ghanzi district do not stay on one farm, but move around from farm to farm (Guenther, 1976).
- (2) The data concerning the number of items was taken from "Project Memo" of the Ghanzi Craft Company.
- (3) The hunting set includes a spear, bow and digging stick, which are kept in a bag made from the skins of steenbok or duiker, and 3 arrows and 2 hard sticks for starting a fire, which are kept in a quiver made from the root stalks of the acacia.
- (4) There are various reasons for the fluctuations in production amounts of handicrafts. Production of certain products may be stopped, or sometimes production amounts are reduced to balance the number of the same items which are produced in areas outside Xade. The Ghanzi Craft Co. also seems to have influence over the type and number of items produced.

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————— Accepted July 30, 1996.

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